The Pacific Coast Architect

VOLUME 4 PORTLAND, OREGON, DECEMBER, 1912 NUMBER 3

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

ADVERTISING RATES ON APPLICATION TELEPHONE MARSHALL 236

Current Comment

Some people who don't believe in advertising are tickled to death if they can get it free.

* * *

Let everybody lend a hand or a shoulder now and help push the prosperity wagon along.

* * *

Some of the blame for the lies we tell ought to be charged up to people who ask our candid opinion.

* * *

Australia seems to have an inexhaustible supply of marble, the stone being found there in many colors, in addition to pure white.

* * *

A factory in England has succeeded in making paper from Australian blue gum wood, of which there is a large supply available.

* * *

Hollow tile for well construction is making quite a noise in the building world, even though it is something of a noise deadener itself.

* * *

The man who stands at the bottom of the ladder and steadies it is often of more benefit to the country than the one who climbs to the top.

* * *

When a man comes home at 2 A. M. he thinks it is his business, his wife thinks it is her business, and both think it is none of the neighbors' business.

* * *

No matter how well any man in the business has done this year, there is a perfectly natural desire to do better next, and right now the chances for it look good, too.

To a Chicago man has been granted a patent for a device which, when attached to a lock, automatically records when the lock is opened or closed and by whom.

* * *

Wherever there is a building material show, there is a good place to have brick prominent, and by the term brick is meant all clay products used in or on top of buildings.

* * *

A woman yearns to be idealized, but a man wants a wife who will take him or leave him just as he is; in short, who will accept him as a "mere man" and let him go right on being "mere."

* * *

When there is an attractive brick building goes up in your community get a picture of it and print it in your local advertising, for it will likely help inspire someone else to build with brick.

* * *

There are now tales of scientists applying electricity to children to make them brighter mentally and hardier physically. The next thing we know someone will be offering an electric hustler for tardy and slow moving men, so that work will become a sort of ragtime pleasure instead of a weary drag.

* * *

Notice to Patrons and Friends

THE PACIFIC COAST ARCHITECT has moved from its former quarters, 510 Lewis Building, to 803 same building, where the publishers will be pleased to meet all friends and patrons.

* * *

Delegates to the A. I. A. Annual Convention

The delegates from the Washington State Chapter who will attend the annual convention of the American Institute of Architects are W. J. Sayward, W. M. Somervell and John Graham.

* * *

Calgary Architectural Club

The Calgary Architectural Club is a new organization. The following are the officers: Honorary president, George M. Lang; president, R. A. Miller; vice-president. E. Thompson; honorary secretary-treasurer, George A. Oman, 501 Beveridge Building, from whom interested persons may obtain full information. The executive committee consists of the officers, D. S. McIlroy, George Fordyce and two affiliated members of the club.

Vancouver (B. C.) Chapter, Society of Architects

November 14, "Modern School Planning" formed the subject of a paper by Mr. G. A. Birkenhead at a meeting of the Vancouver Chapter (B. C.) Society of Architects. President N. A. Leech presided.

* * *

Annual Meeting, Tacoma Society of Architects

At a recent annual meeting of the Tacoma Society of Architects, the following were elected as officers for the next year: Luther Twitchell, president; Earl Dugan, vice-president; R. E. Borhek, secretary-treasurer. Sketches were submitted looking toward the establishment of a civic center.

* * *

Portland Architects Elect Officers

The Portland Architectural Club, at its recent annual meeting and banquet at the Commercial Club, elected the following as officers of the chapter: Edgar M. Lazarus, president; John Wilson, vice-president; H. A. Whitney, secretary and treasurer; Ellis F. Lawrence and Morris G. Whitehouse, trustees.

It was decided to hold an exhibition of drawings next June. During the same month a convention of architects will be held west of the Rocky Mountains in Portland. For this event committees were appointed.

* * *

Victoria (B. C.) Chapter, Society of Architects

At a meeting of the Victoria (B. C.) Chapter, Society of Architects, held November 21, Mr. J. R. Grant presented a paper on "Steel Construction as Applied to Buildings." Papers to be presented at future meetings have been announced by Secretary Ernest Butterfield, as follows: December 19, by Mr. J. C. Pendray, on "The Manufacture of Paints and Their Uses"; January 16, by Mr. C. A. Newhall, on "Analysis and Tests in Building Materials"; January 30, by Mr. A. L. Webber, on "Plumbing"; February 13, by Mr. Paul McMichael, on "Terra Cotta"; February 27, by Mr. H. C. Moss, on "Electrical Engineering"; and also on a date to be announced later a paper by Mr. F. C. Engholm on "Reinforced Concrete Construction."

* * *

Brick Column Resists Enormous Pressure

At Pittsburg, Pa., recently, there was a severe test applied to a brick column, 12 feet high and 3 feet 11½ inches square. The testing machine of the Government's Bureau of Standards was applied. The brick column had been erected for 30 days and was thoroughly dry. Equal parts of Portland cement and sand were used in the mortar. Several days prior to the final test, 4,700,000-pound pressures were applied to the column without effect. Then, when the final test came, a pressure of 1,500,000 pounds was first applied. Gradually this was increased to 6,580,000 pounds, before the column partially broke and cracked. Even then the center of the column was apparently as strong as ever.

The Building Record

The following shows the comparative building figures of Western cities for October, 1912, and October, 1911:

Los Angeles, Cal.—October, 1912, $2,667,780; October, 1911, $1,821,727; gain, 46 per cent.

Oakland, Cal.—1912, $836,169; 1911, $621,907; gain, 34 per cent.

Portland—1912, $1,608,780; 1911, $1,690,980; loss, 37 per cent.

Salt Lake City—1912, $209,476; 1911, $173,700; gain, 20 per cent.

San Francisco—1912, $1,722,860; 1911, $1,255,892; gain, 37 per cent.

Spokane—1912, $146,730; 1911, $185,025; loss, 20 per cent.

Seattle—1912, $374,045; 1911, $638,895.

Tacoma—1912, $189,273; 1911, $172,471.

From January to November 1, 1912, and for the corresopnding period in 1911 the records show:

Los Angeles, Cal.—1912, $26,503,552; 1911, $19,775,427; gain, 34 per cent.

Oakland, Cal.—1912, $7,735,022; 1911, $5,878,822; gain, 31 per cent.

Portland—1912, $13,380,827; 1911, $15,845,859; loss, 15 per cent.

Salt Lake City—1912, $3,052,638; 1911, $2,457,600; loss, 14 per cent.

San Francisco—1912, $30,337,505; 1911, $18,090,155; gain, 12 per cent.

Spokane—1912, $2,041,322; 1911, $3,083,435; loss, 33 per cent.

Seattle—1912, $7,043,665; 1911, $6,715,161.

Tacoma—1912, $1,506,068; 1911, $1,496,442.

At Vancouver, B. C., the October permits were valued at $3,597,165, a heavy increase over the record for October, 1911, when the total was $1,506,375. The totals for ten months, January 1 to November 1, were, respectively, 1912, $16,359,702; 1911, $15,068,763.

The record at Victoria for the first ten months of the year was $6,564,010, as against $3,167,340 in 1911.

The ten months' totals at Calgary, Alberta, for the two years shows, respectively, $17,456,716 and $11,664,138.

* * *

Economy of the Germans

The point of economy is carried out to a remarkable degree among the people of Germany, especially in the matter of wood treatment, in which everything is utilized "except the rasp of the saw, as it cuts the log"—to borrow one writer's phrase. Artificial silk is made from the fiber or pulp, as are also bristles, cloth, paper, canvas, carpet. twine and yarn. The sawdust makes excellent parquet flooring.

* * *

Lumber Orders for 100,000,000 Feet

Recently the Canadian Car & Foundry Co., of Toronto, the American Car & Foundry Co., of St. Louis, and the Pullman Car Company, of Pullman, Ill., placed orders for 100,000,000 feet of Oregon and Washington lumber. The former contracted for 20,000,000 feet and the two latter 40,000,000 feet each, all orders to be filled during the present season. The shortage of cars, reaching up to 31,000 cars in October, is responsible, in the main, for this big order.

The Apartment House

By H. Fred Claussen.

ALTHOUGH the apartment house seems to be an innovation to the average person, the history of architecture reveals the fact that centuries before Christ the Egyptians used the idea in designing their temples. These apartments were used as royal residences and for the mysterious devotions of their religion so that the kings, priests and councillors could be in close communication. During different periods of history the apartment has assumed many forms. The cave dwellers and the Pueblo Indians approached this style of living, and the mediæval castles, which accommodated lords, guests, servants, soldiers and even prisoners, could be classed as apartment houses.

The unprecedented rush to the cities in late years can most probably be termed the immediate cause of the modern apartment house. Most large cities of today show a striking percentage of growth in population, not only in this country but in Europe as well. Most business or manufacturing, which is the backbone of the population, is congested to a small area. These business sections were soon dotted with huge office buildings and factories which sheltered hundreds, even thousands, of employes under one roof. The worker desired to live in close proximity to his work. Land was limited and increased in value to such proportions that individual dwellings were prohibitive, so homes were built to accommodate two families, four families, innumerable families, in one building. Thus we had the modern apartment house. The idea appealed to the worker and spread to the other classes. Today Berlin apartments house 998 people to every two that live in homes. In other cities in Europe and America the proportions are gradually approaching those of Berlin.

From the beginning apartment houses showed unusually large returns for the investor. Speculators appreciated this and proceeded to reap a harvest from the "innovation." Buildings were put up promiscuously, without regard for the health or convenience of the tenant. Apartments were planned without consideration of the needs and comforts of those who occupied them. Exteriors resembled anything from a fort to a church. Still they filled up and paid excellent returns on the investment. However, as the numbers increased and investors realized that this mode of living had taken a firm and lasting hold, conditions began to alter. Speculators profited by the mistakes of their first ventures, builders heeded the criticisms of occupants and architects gave much thought and study to the arrangement and design of the buildings. The gradual improvement from year to year has made the apartment of today the last word in comfort, convenience, beauty and sanitation.

Apartments vary the world over. Germany and France have apartments in conjunction with places of business; beautiful and luxurious apartments for the owners, in bank buildings for instance, with smaller, plainer apartments for the help. Here, also, because elevators are not in common use, are the large establishments with sumptuous apartments for the rich in the most desirable parts of the buildings, while the upper floors are arranged into smaller cheaper suites for the poor. English plans reveal a love for exterior beauty, fireplaces and entertaining facilities, but poor arrangement of rooms and a lack of light, ventilation and sanitation. A recent Italian plan discloses an almost American conception of the arrangement of the public, private and servant features of the apartments. However, although the European apartment leans toward the beautiful, the neglect of ventilation, light and sanitation are striking.

Apartment houses in America also vary greatly with the location and class of people who are to occupy them. In New York we find almost every variety and style of apartments. Rents vary from practically nothing to $25,000 per year, and naturally the apartments vary accordingly. Year by year the huge tenements are becoming more habitable. The dark, dingy, stuffy room of the frame firetrap is being rapidly replaced by the light, airy, large room of the modern, fireproof tenement. New laws make necessary larger light courts, wider corridors and stair wells, better sanitary conditions and, on the whole, better living places for the poor. The striking part of this evolution is the fact that the fireproof tenement costs but little more and is proving to be a better paying investment than the firetrap it has replaced, and there is no question about the permanence of the investment. The better apartments, although also strictly regulated by law, reveal a discrimination on the part of the tenants which greatly affects the building. Many buildings have but one apartment on a floor. The rooms are often as many as 20 in number and have ample quarters for the servants necessary to keep up such an establishment. The service in such buildings approaches perfection, and the concessions made tenants are in keeping with the enormous rentals they pay. Such apartments are a possibility in large cities like New York and Chicago, where among the millions of inhabitants many desire and can afford such a mode of living.

In planning the apartment the architect should revert to the plan of the well-arranged residence. As in the residence, the public, private and servant portions of the apartment should be segregated and the entrance or reception hall should be the means of access to each without disturbing the others. The advantage of the apartment, however, is the elimination of the stairway of the residence and the innumerable trips between floors during the day. The public portion, the living and dining rooms, the library, etc., should be grouped together and should have large openings between the rooms so that they may be used for entertaining purposes. Next to the dining room should be the kitchen, with or without the pantry, so that meals and refreshments may be served to the best advantage. The servant rooms should be located as near to the kitchen and as near to the center of the apartment as is permissible. Grouped by themselves and also easily accessible from the reception hall should be the chambers and bathrooms. Where the apartments are large and it is impossible to have the chambers facing the street, the rear court or yard upon which they face should be made as attractive as possible. Roomy clothes and linen closets, conveniently located, are of inestimable value when renting apartments, and a large closet from the hall, with cedar chests to store unseasonable clothing, has lately been considered a necessity. The use of hard woods for interior finish and floors is becoming inevitable. Tile floors and walls in baths and kitchens are rapidly gaining favor. Simplicity and beauty of design of the interior is a requisite, for the reduction of housework to a minimum is one of the advantages of the apartment.

For the convenience of the tenant many novel devices have been introduced into the apartment house. First the elevator and later the automatic elevator make the upper apartments of the building accessible and even more desirable because of the better light and air and usually the better view. The dumb-waiter makes possible the delivery of all necessities to the kitchen without the use of the

corridors. Thus are delivery boys restricted to the use of the delivery room in the basement. So, also, by the use of small, sanitary cans, is garbage handled to the best advantage. Built-in cupboards, buffets and bookcases are often provided. The idea of co-operation, inasmuch as one janitor serves all the families and one heating plant heats all the apartments in the building, brings these conveniences within the reach of many people who could not afford them in private homes.

In some cities the porch is considered an invaluable adjuct to every apartment. In Chicago, and in fact in most of the cities of the middle states, apartments today are seldom built without the porch. The location is where the best view is obtainable, day and night, and also in conjunction with the most important bedroom, so that it may be used for sleeping purposes in favorable weather. Such porches, however, are only built in buildings that contain apartments of five rooms or more and are often counted as an extra room. The added cost of the building and the convenience and pleasure derived from the porch makes the rentals higher for such apartments.

Apartment houses in Eastern cities, where the building lots have a 50-foot frontage, have seldom more than two apartments on a floor. The living room and the most important bedroom of each apartment are placed on the street front, while the remainder of the apartment is strung along the length of the building and is accessible from a long hall. On the Western coast, however, a different condition prevails, for the average apartment is smaller than in the East, due to the elimination of the bedroom.

It was probably in Los Angeles, where the transient tourist population made such a condition possible, that the bedroom was eliminated and superseded by the disappearing bed. The idea, new and novel but a few years ago, quickly took hold and has been looked on with more favor from year to year. The wall bed folds into a recess built in the wall of the living or dining room; the rolling bed slides through the lower portion of a built-in bookcase or buffet and under a raised closet or dressing room floor. Thus the two or three rooms, fitted with the disappearing beds, answer the purpose of the larger apartment, in that the living rooms are changed into chambers in the twinkling of an eye. The ingenuity of the manufacturer made the bed sanitary and the public quickly accepted them as practical. Other features of the apartment received attention. Space saving, which eliminated the bedroom, cut down the size of the kitchen and did away with the pantry. The kitchenette contains the sink, range, refrigerator and built-in cupboards, each within arms' length of the other. This saves many steps in the preparation of a meal. A plan embracing these features has five three-room and three two-room apartments to each floor in a building on a corner lot 50 feet by 100 feet. The rooms are all large, well arranged and have plenty of outside light and air. On an inside lot of the same dimensions four three-room and four two-room apartments were planned, but the rooms suffered slightly in size.

An ideal arrangement for the three-room apartment is shown in Fig. 1. The reception hall is entered from the main corridor and has a built-in hall tree. This reception hall opens on all the rooms of the apartment except the kitchen, and as deliveries are made by dumb-waiters from the basement to the kitchen, such an entrance is unnecessary. The opening between the reception hall and living room is cased; there are French doors between the reception hall and dining room and large sliding doors between the living and dining rooms. The convenience of the bath and dressing closet off the reception hall is obvious. The rolling bed in the living room is hidden by the bookcase and slides under the closet floor. Thus in case of sickness or in case some one retires, by closing the sliding doors between the two rooms, he is entirely segregated from the remainder of the apartment, but it is also still possible for the occupants of either room to gain access to the bathroom, closet or corridor without disturbing the occupants of the other room.

Figure 1

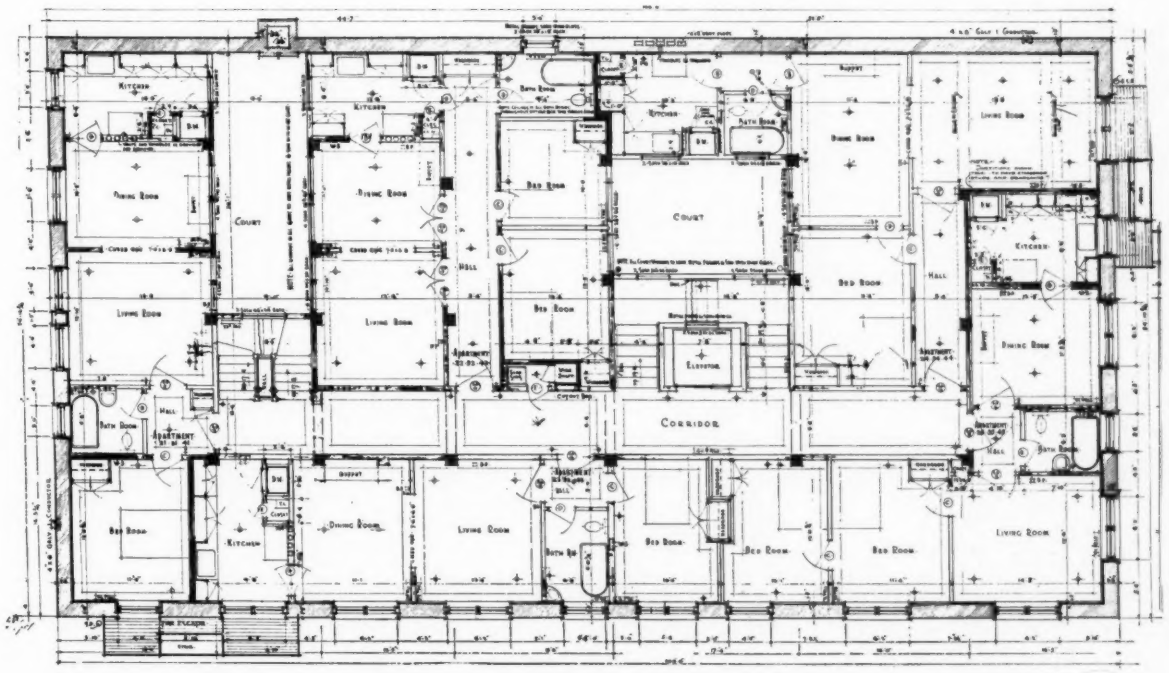
TYPICAL FLOOR PLAN

Another interesting plan is shown in Fig. 2. The lot is 45 feet by 60 feet and the location is so close to the business district that larger apartments would not have been as good an investment. Five two-room apartments are on

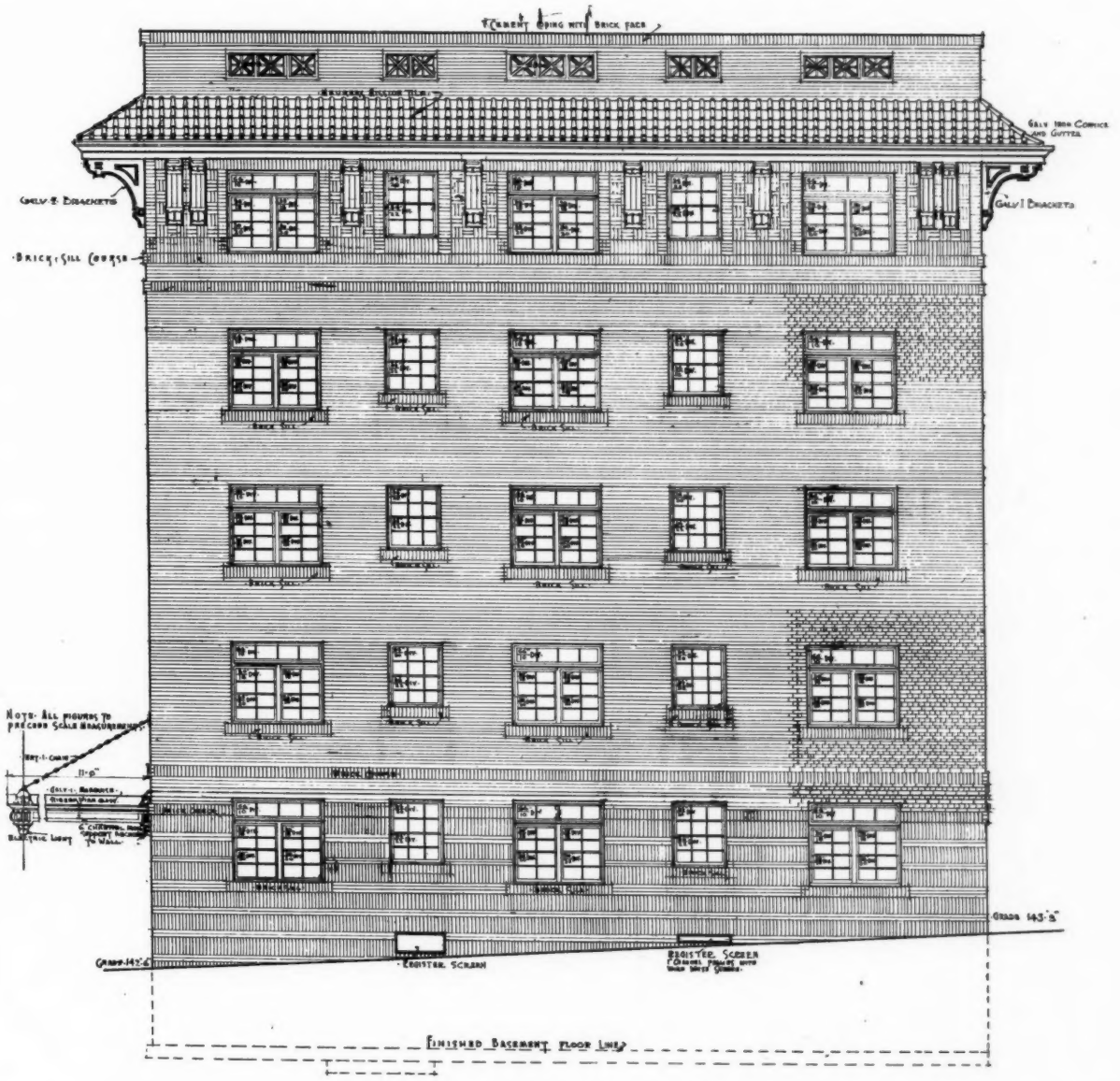
Continued on Page 127

Carmelita Apartments, Portland, Oregon
Mr. Lewis I. Thompson, Architect

Photo by
Angelus Studio



Typical Floor Plans, Carmelita Apartments, Portland, Oregon
Mr. Lewis I. Thompson, Architect



Detail Elevation, Carmelita Apartments, Portland, Oregon

Mr. Lewis I. Thompson, Architect

Interior, Carmelita Apartments, Portland, Oregon
Mr. Lewis I. Thompson, Architect

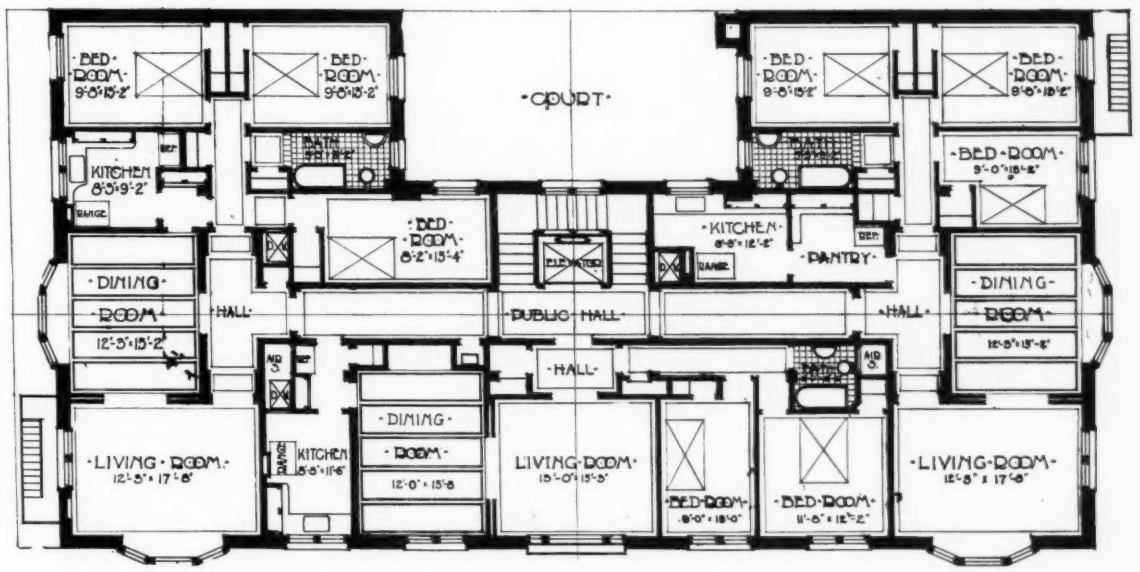
Photo by Angelus Studio

Interior, Carmelita Apartments, Portland, Oregon
Mr. Lewis I. Thompson, Architect

Photo by Angelus Studio

The Wickersham Apartments, Portland, Oregon
Whitehouse & Fouilhoux, Architects

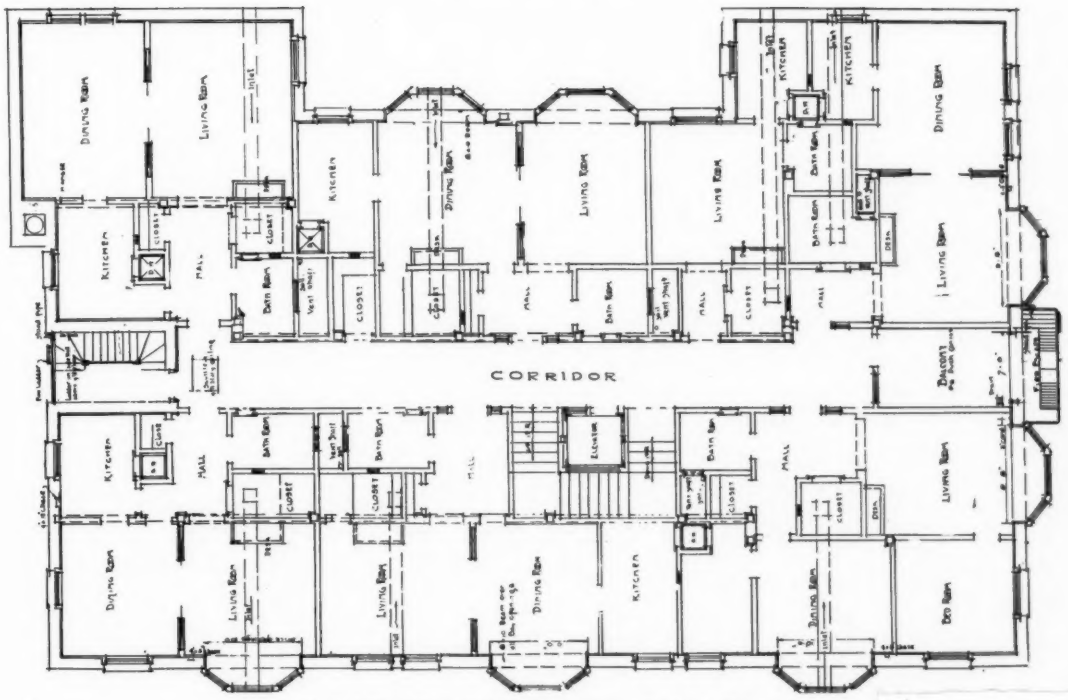
Photo by Angelus Studio



Typical Floor Plan, The Wickersham Apartments, Portland, Oregon
Whitehouse & Fouilhoux, Architects

Nob Hill Apartments, Portland, Oregon
Emil Schacht & Son, Architects

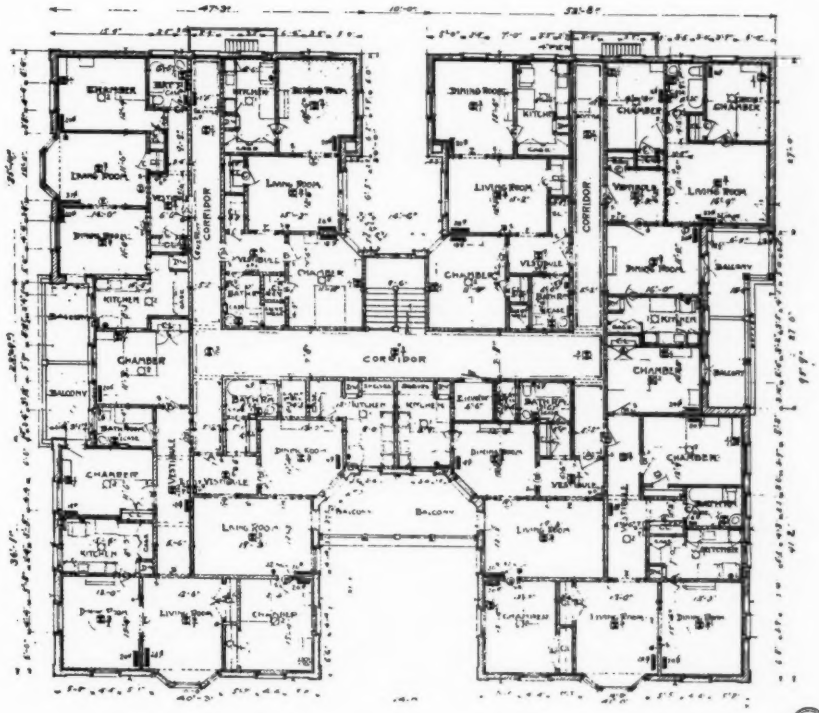
Photo by Angelus Studio



Typical Floor Plans, Nob Hill Apartments, Portland, Oregon
Emil Schacht & Son, Architect.

Highland Court Apartments, Portland, Oregon
Mr. A. C. Ewart, Architect

Photo by Angelus Studio



PLAN OF THE FOURTH FLOOR.
SCALE 1/8 FT.

4

APARTMENT HOUSE FOR
MR L. PALLAY.
A.C.EWART-ARCHT-527 BECK BLDG.

Highland Court Apartments, Portland, Oregon
Mr. A. C. Ewart, Architect

Elevation

Photo by
Angelus Studio

Typical Floor Plan

Wilmar Apartments, Por
Claussen & Claussen, A

Entrance

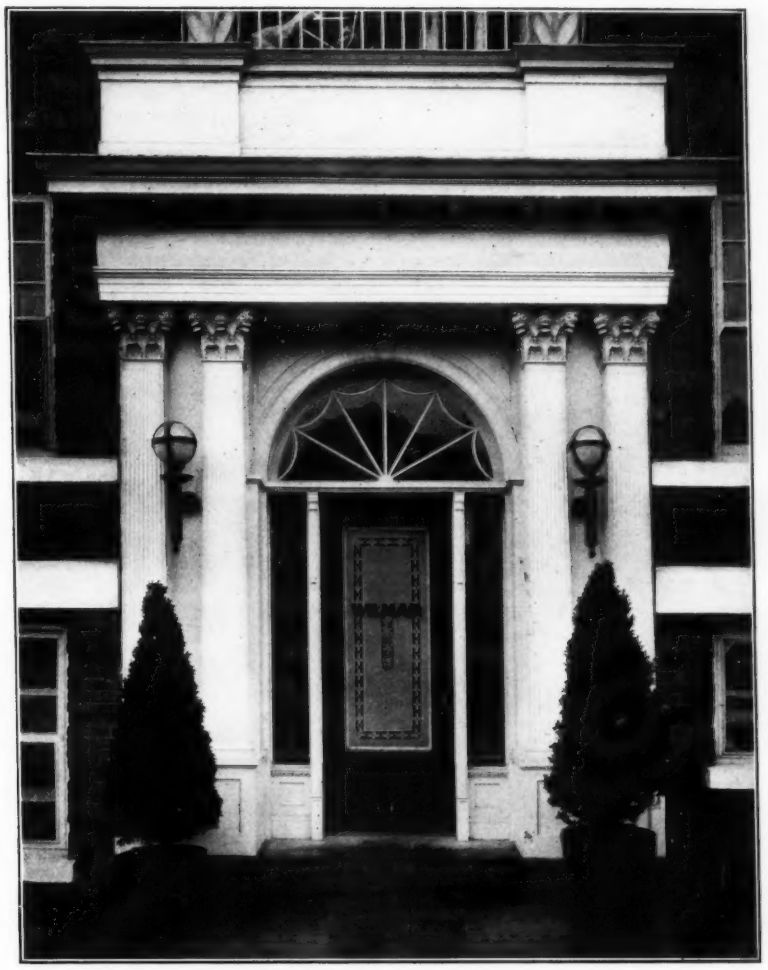
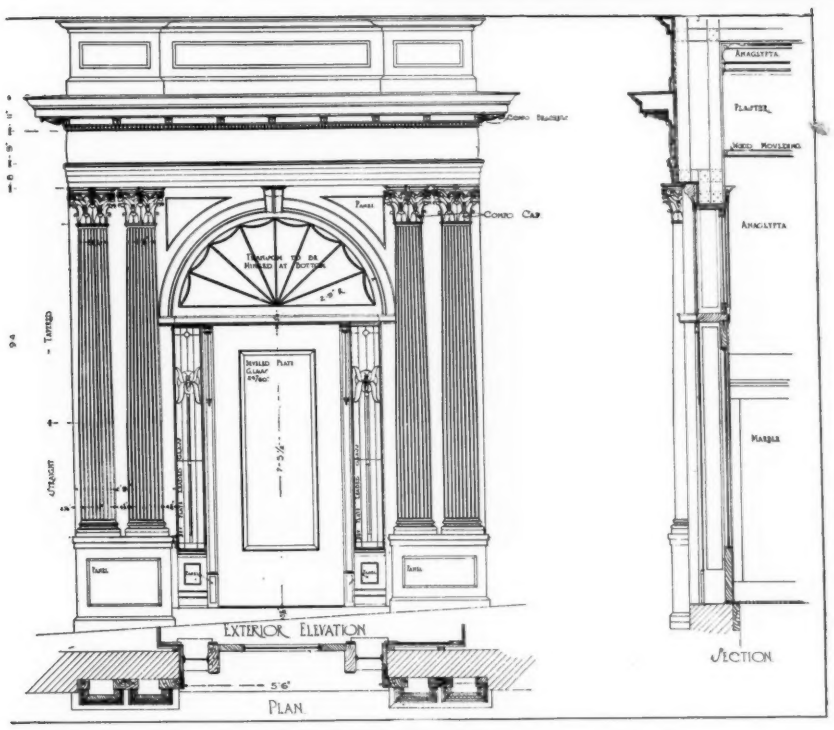
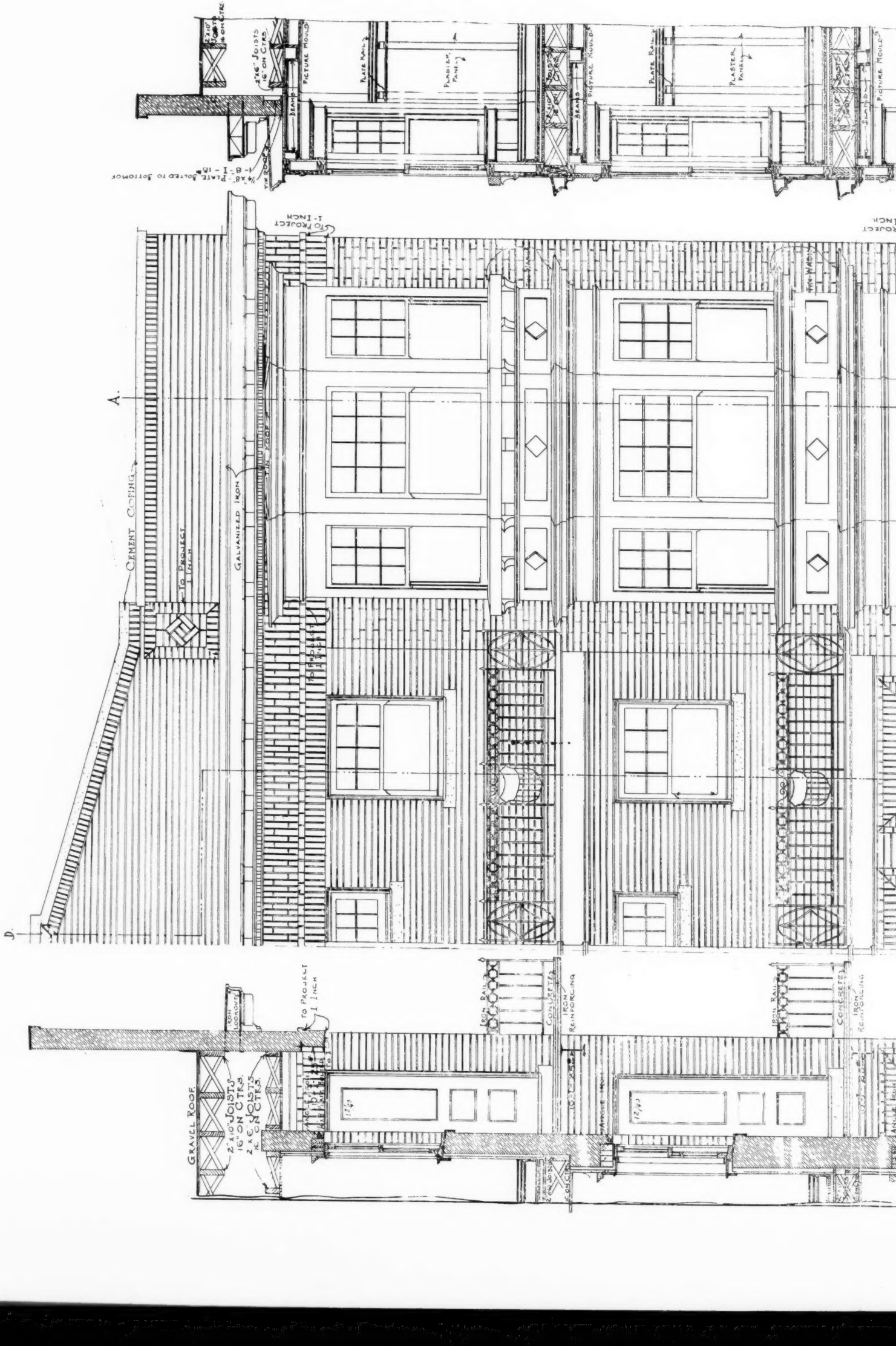


Photo by
Angelus Studio

Apartments, Portland, Oregon
ssen & Claussen, Architects



Detail Entrance


2"x10" Joists 16" on Ctrs.
Plaster Panel
Picture Mould
Plate Rail
Beam
Plaster Panel
Picture Mould
Plate Rail
Plaster Panel
Picture Mould
1-8"-1-10" Plate bored to bottom of
To Project 1-inch
Cement Coping
To Project 1 Inch
Galvanized Iron
Tin Roof
Tin Roof
Gravel Roof
2"x10" Joists 16" on Ctrs.
2"x6" Joists 16" on Ctrs.
Iron Rail
Concrete
Iron Reinforcing
Iron Rail
Concrete
Iron Reinforcing
To Project 1 Inch
A.
D.

SECTION "J-J"

1/2 INCH "B" SCALE DETAIL - LUCRETIA ST. "A" ELEVATION.

SECTION "A-A"

DETAIL WILMAR APARTMENTS

CLAUSSEN & CLAUSSEN, Architects

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Continued from Page 106

each floor and each apartment is complete in every detail. All rolling beds are under closets, all baths are entered from reception halls and all the rooms are large, light and airy. Buffets are built over the bed openings and sufficient cupboard space is provided in the kitchens. The corridor is short, making all apartments convenient to the stairway.

In making the general floor plan for an apartment house the architect should make the corridors as short as possible and of ample width. Outside light should be provided for the corridors and stair wells. The stairs and elevators should be central and prominent. Sufficient courts should be provided to allow light in all the rooms regardless of the class or height of the surrounding buildings. Sufficient ventilation for kitchens and baths should be provided and kitchens should never be placed on inside enclosed light courts. Where the kitchens face the street, a small ventilator through the brick wall at the ceiling line will carry off all the odors, and where the kitchens face a rear court the same result may be obtained by raising the head of the windows to the ceiling line. Heating can be accurately figured and ample heat and hot water should be provided, for in this respect tenants are usually very particular. The plumbing should be economically arranged to keep down the first cost, the fixtures should be neat and serviceable

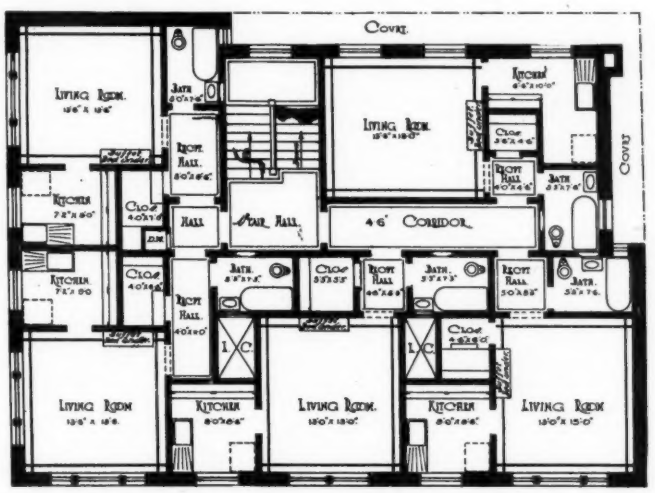

Figure 2 TYPICAL FLOOR PLAN

and provisions against noises and water hammering should be made. Tradesmen's entrance, delivery room, laundry, fuel room, heating plant and janitor's apartment should be arranged to the best advantage in the basement. In buildings of small apartments the ideal arrangement above mentioned should be used, and the architect should endeavor to arrange his plan to obtain the greatest number of apartments with a street frontage.

The problem of housing the public is an old one and easily can be made a profitable one. The modern apartment is the outcome of years of study and expense and goes a long way toward solving the problem. When the building is built in accordance to the location; when it is made pleasing to the eye; when it is substantially constructed and ample protection against fire is provided; when the interior is intelligently planned, neatly finished, and is made to appear as homelike and inviting as possible; when modern conveniences are installed; when the first cost is considered and is in keeping with the class of building erected; when the original provisions are such that the maintenance expense is reasonable; when the rentals are just and the management is courteous; in fact, when intelligence, foresight and proper economy are used in the erection, upkeep and management of the apartment house, the investment will be found a paying and permanent one.

Vacuum Cleaning for Apartment Houses

By L. A. MARSH.

VACUUM CLEANING has reached a development where it is essential to every modern building, and actual observations show that the apartments equipped with efficient cleaning apparatus rent more easily than those not thus equipped. In these days of keen competition, apartment owners endeavor to offer the public the acme of comfort and convenience, and it is evident that the appearance of the building, its halls and corridors, will have a decided influence on the first impressions of a prospective tenant.

Vacuum cleaning enables the building to be kept in the most perfect state of cleanliness, even though the halls are used by many persons daily, and the building is always fresh and lacks the musty and depressing atmosphere which exists where the dirt is swept into a carpet and allowed to accumulate. An apartment of mediocre finish which is kept spotlessly clean by vacuum will present a far more attractive appearance than one of luxurious furnishing which appears dingy through lack of thorough renovating.

The vacuum cleaner in apartments is also a sanitary safeguard, removing insect eggs or germs and protecting the occupants to a great extent against any infection that might exist in one apartment; furthermore, a vacuum plant should displace approximately eighty cubic feet of air per minute at each sweeping with renovator in action, and this changes the atmosphere in the room, carrying the air from the floor and exhausting it out of doors and drawing in fresh air to replace it. This feature acts as a ventilating system and, instead of raising dust and infecting the air of the room during sweeping, the vacuum plant cleans without dust and simultaneously fills the room with fresh air.

Another feature not generally considered by apartment owners is the fact that the vacuum plant is a positive economy to the building, in saving the rugs from undue wear and also keeping the walls and ceilings clean and reducing the cost of finishing them.

Rugs wear from the fact that the particles of grit, carried in by many shoes, lodge in the nap of the rug, and, being walked over, grind out the nap where it is fastened to the body of the carpet. The wear on carpets where grit is not present is negligible, and here the vacuum plant shows its greatest value by keeping out the grit which destroys the carpet.

A powerful vacuum will also prevent the lodgment of insect eggs, such as those of moths, etc., for many carpets are destroyed by allowing insect eggs to hatch. This operation usually takes place on the lower side of the carpet adjacent to the floor, and requires a high vacuum to properly renovate.

Walls and ceilings finished in light colors become discolored owing to the deposit of fine dust on them and require refinishing. With a vacuum plant, tools should be provided suitable for cleaning walls and ceilings and reduce the finishing expense at least 50 per cent.

Many apartments use the vacuum plant to clean the corridors and do building cleaning and arrange to furnish vacuum service to the tenants at reasonable rates at intervals of about once a week per apartment.

It is preferable to have the building operator do the cleaning in the apartments rather than to allow the tenants to do the cleaning themselves, for the reason that the regular operator is familiar with the handling of the apparatus and knows what to do in case of any accident, and will give better satisfaction than could be had otherwise.

It is customary to charge the tenants approximately seventy-five cents per hour for the use of the machine and an operator, this charge being reasonable to tenant and covering all operating expenses of the plant to the owner.

One point should be borne in mind, however, that is, it is poor economy to buy a small vacuum cleaner for $40 or $50 that will not clean any more than a $3 carpet sweeper. If the owner thinks a vacuum plant is justifiable, it should be one that will clean rapidly and thoroughly, and show a saving in labor on the part of the operator. By rapid work the saving in labor will eventually pay for the cost of the machine. It has been found in actual practice that at least 75 cubic feet of air should be displaced at each sweeper per minute, and that a vacuum of 10 to 12 inches of mercury is essential for good cleaning, and this result requires the expenditure of between two and three horsepower.

The most efficient type of vacuum producing machine built is the double acting reciprocating pump, and one of these plants of good quality should last as long as the building stands.

Small hose is also to be preferred on account of its greater flexibility, lighter weight and ease in handling. If large hose is made extremely light, its strength is sacrificed, and if made strong its weight is excessive. The vacuum hose should be 1 inch internal diameter and should be, preferably, of flexible steel, to insure the greatest ease in handling and greatest durability.

A skilled operator can clean thoroughly 32,000 square feet of surface in a day. This gives an idea of the labor saving possibilities.

The time is not far distant when a vacuum cleaning plant will be considered as essential as a furnace.

* * *

Value of Electric Dumb Waiters in Apartment Houses

By A. A. RUCKER.

THE contractors and investors who have followed closely the development of apartment house construction on the Pacific Coast admit that this method of living is just in its infancy. As the construction of apartment houses advanced, there was seen the need of a dumbwaiter to send the groceries up and the garbage down from the apartments. The first type of machines tried out were the hand-power and the hydraulic, but these were found to be lacking in efficiency. Too much time was consumed in operation, also the upkeep of the hydraulic machine was too great and at the same time not satisfactory. With the development of the electric machine the previous types have been relegated to junk heap. The electric machine now used on the Pacific Coast is automatic and measures up to the requirements in every respect.

The advantages of having dumbwaiter service in each apartment are many. First, from the standpoint of the owner or the lessor, the revenue of the building is increased at least two dollars per suite for the lowest priced apartment to five and six dollars for the best apartment over apartments without such service. The electric dumbwaiter increases the efficiency of the janitor four or five times what he can possibly do without dumbwaiter service. It enables him to handle the grocery deliveries in the morning and evening with dispatch. Invariably during the janitor's rush hours of mornings and evenings, several of the tenants at the same time will want their groceries delivered or the garbage taken away. The electric dumbwaiter enables him to wait upon them without one imposing on the other. He can do in thirty minutes what would require two or three hours the old way of carrying the groceries up and the garbage down.

Tenants, after having once lived in apartments with dumbwaiter service in each kitchen, will refuse to live in apartments without it, because by the old style or method of serving apartment house dwellers, it is necessary for the janitor or the tradesmen to deliver the groceries, etc., to the apartments in person. The janitor, of course, has only a limited time at his disposal in which to do this work, so when he makes the deliveries the probabilities are that the tenant is entertaining, not at home or cannot conveniently receive them just at that time, causing much of the janitor's time being wasted. By the new system the janitor receives all the packages, groceries, mail, etc., then, at a later time he can make the distribution by the use of the dumbwaiter, or wait until the tenant notifies him either by 'phone, speaking tube or a push bell system that she desires her packages, which he sends up by the dumbwaiter route right into her kitchen and none of the other adjoining tenants are disturbed in any way whatever. This does away with the tradesmen in the hallways and gives to the tenants absolute privacy. In the morning, first is the iceman; then the laundryman, groceryman—first one, then another making deliveries. If all these people are admitted above the basement, it makes the apartment house too public and is rated as a second or third class house, but the electric dumbwaiter does away with all this.

The general wear and tear on the brussel carpets by permitting the tradesmen in the hallways and apartments is considered a big item by those who have had experience with apartments, which can be avoided by the use of dumbwaiter service in each apartment. Garbage and refuse carried through the hallways will always leave an odor, which will remain in the building for several hours, making it very unsanitary, to say nothing of the unpleasantness of having this smell entering the apartments; but with the dumbwaiter system the garbage is sent down to the basement and no person knows it except the one sending it and the one receiving it.

Delivering the groceries and taking out the garbage are two of the greatest requirements of dumbwaiters, but there are other uses to which they may be utilized, sending the clothes down to the washroom and in some apartments there is maintained a dishwashing machine in the basement. If the tenants want to take advantage of this convenience they place their dishes on the dumbwaiter after each meal, sending them down to the basement to be washed and in a few minutes they are returned by the same route all clean and ready for the plate rail or the china closet.

The electric dumbwaiter is now considered to be one of, if not the greatest of conveniences in apartment house construction, and most of the fine residences, as well as the latest up-to-date hospitals, are installing electric dumbwaiters, because of the convenience and the many steps they save for the servants. It is practically indispensable.

Description of the Carmelita Apartments

The Carmelita Apartment, owned by the Reed Institute, was built on the corner of Thirteenth and Jefferson streets two years from this present date by Lewis I. Thompson, architect, and is considered to be one of the finest apartments on the Coast. The building was built with the idea of permanency. The electric wiring throughout the building is all installed in conduits, which will allow the building to be re-wired if the electric rules are entirely revised by the underwriters in any number of years; likewise the heating plant is of the same permanent type, being of low pressure steam boiler of the greatest efficiency, with return water pumps pumping it back into the boiler, which reduces the fuel consumption. In the basement and in the hollow space between the roof and the ceiling of the fifth floor are all the main steam headers, which are covered with asbestos so as to enable anyone in the future to reconnect the entire building or change any of the pipes without tearing off the plastering from the walls.

The electric passenger elevator is of the latest Otis automatic type, and the machinery and other necessary appliances are placed in a fireproof room adjacent to the elevator shaft in the basement; this room is also dustproof. The individual dumb waiters are of the automatic electric type and can be operated from any apartment, it not being necessary to obstruct valuable space in the basement with overhead cables; of course, all dumb waiter shafts are fireproof, with fire doors at each apartment. Each apartment opens directly upon a fire escape (with the exception of one interior row) which have ample exit facilities leading directly to two staircases and the main elevator. In the basement are maids' rooms, finished equal to the apartment rooms in every respect, approached by a finished corridor from the elevator, with bathrooms. Also each apartment has a storage room, where furniture or trunks may be stored; there is also a delivery room, with boxes covered with a wire grille that the air may circulate freely, the door having a lock belonging to each apartment; all deliveries to the house can be made to this room and can later be sent up to the apartment in case of absence at the time of delivery; also a fireproof ash and garbage room, a fireproof meter room where electric and gas meters are installed, which may be read only with permission from the janitor.

The surplus fuel room is located under the sidewalk, where is likewise the fuel oil tank. The boiler is arranged so that either class of fuel may be burned in event of failure of the other. There is also a laundry room equipped with porcelain stationary washtubs, steam coils for drying, and a provision for a steam mangle, etc.

The janitor's suite of apartments is arranged in the basement near the tradesman's entrance and vestibule. Upon entering the apartment from the street one passes through the vestibule, which is finished in marble, up the steps and through double doors, which insures quietness and no dust in the summer time. The corridors in this building are extremely wide and the building is so planned that it is only necessary to have one absolutely straight corridor running from one end of the building to the other. It is finished with a paneled wainscot and cornice throughout.

The floors throughout the building are of the construction called "floating floors," which make it extremely easy to walk upon and absolutely silent. The interior walls are deadened with sound-deadening material. There are no electric chandeliers hanging in any of the rooms; the lighting is obtained by the use of ceiling units and side-wall brackets, and each room is equipped with base plugs, allowing portable lights to be used; these are all controlled by electric switches. The arrangement of the apartments of course differs, but the same general idea prevails in all, *i. e.*, the entrance from the corridor is immediately into a vestibule, or entrance hall, which is equipped with a Pacific telephone and has a wardrobe for hats, coats, etc. This leads directly to the bathroom, and on one side are the bedrooms and on the other side the living room, dining room and kitchen; this is a most convenient arrangement, as can readily be seen. The rooms are all large, light and airy.

The woodwork is of special design, paneled to a chair rail with a heavy wood cornice, and is painted in a soft French gray. While the building is of post and girder construction, the same is most effectively concealed. Where impossible to be concealed in partitions, they are arranged in beam and pilaster treatment, the corridors being absolutely clear. The dining rooms throughout are equipped with built-in buffets for silverware, cut glass, etc.

The bathrooms have tiled floors, sanitary base and walls and ceilings of plaster tile. The fixtures are of the very best and were picked out with the view in mind of modern sanitation, neatness and easy working space around them. There are also recessed toilet cases. In the walls of every apartment is a concealed fireproof wall safe with extremely reliable combinations. The kitchens are arranged with the view of economy in operation, the necessary things are placed with the greatest convenience, and, of course, have bins, many large and small drawers, cabinets and cases for dishes; mixing boards pull out all along the counter shelf, and a fireless cooker compartment. The kitchens are also finished in plaster tile on walls and ceilings and are exceptionally well ventilated, the gas stove fumes being carried in separate ducts for every apartment. Into the kitchen, of course, opens the dumb waiter door and alongside of which are service telephones connected directly to every dumb waiter shaft and to the several service portions of the house.

The exterior of the building is composed chiefly of ornamental brick work, using two different shades of the same texture bricks, the difference being barely perceptible. The brick work is laid up in specially designed bonds and forms a very pleasing texture, no terra cotta being used as trimming. Over the entrance is an ornamental marquis with electroliers underneath of bronze. The cornice is finished in green bronze with a tile covering of brilliant red, which adds to the liveliness of the building. The bottom of the larger interior court is used for a summer garden, being equipped with a finished floor and palms, benches, etc. The roof is arranged for a roof garden later. This building is the first unit of the completed building to join the same, making the facade 200 feet long. It now contains twenty-five four and five-room apartments. The heating plant installed has sufficient capacity for both buildings.

* * *

Ending the Petty Graft

Edward B. Crane, a wealthy architect of Philadelphia, was recently appointed superintendent of Independence Hall at a salary of $800 per year. This was the initiative step to remove the position from the hands of a clique of politicians. It places Independence Hall, its records and the old Liberty Bell in charge of a non-salaried commission. There have been flagrant abuses, it is said, and it is estimated that the petty grafts have reached $10,000 annually. Not the least of these was the manufacture and sale of spurious medals and mementos, bringing certain unprincipled parties as high as 500 per cent profit.

Striking a Balance

By BERNARD C. JAKWAY.

THIS is not a treatise on bookkeeping. The balance to be considered is the elusive but important one that exists, as it ought to exist, between the cost of a house and the manner in which it is furnished. The purpose is to emphasize the need for striking a balance, rather than to develop a method.

Those of us who set out to build a house—and this, of course, refers to the home-maker, not the speculator—may be divided into three classes. First come the fortunate few who know that they have enough money both to build and to furnish; then the larger but still to be envied number who have not enough, and know it; then the unfortunate many who think they have enough, but find themselves in error.

This is the class to which most of us attain. We travel different routes, but we get there just the same. For one reason or another, it always costs more to build than we expect. No doubt this is a regulation, like the one requiring us to take out a permit. At any rate, our entire appropriation is usually exhausted by the building alone, so that there remains only to pay the contractor's bill of extras, tint the walls, buy scrim for the windows, and forget the offensive colorings of the old rugs and the ugly rigidity of the old furniture, in the blessed assurance that our wires are in conduits, our ceilings cross-beamed to the limit, and our plumbing installation quite the most expensive in the neighborhood.

Any good house will afford protection from the weather, light, heat, sanitation and domestic conveniences. To convert it into a home, we must fill it with harmonious color, provide substantial floor coverings, comfortable and handsome furniture, and add the hundred and one things—hangings, books, pictures, lamps and art objects—that give it beauty, interest and individuality. Since most men in active life can afford to tie up permanently only a limited part of their capital, it is obvious that too much money spent on the house must mean too little spent on the home. Hence, arises the necessity for striking a balance.

This process of striking a balance is, of course, largely a matter for the personal preference and taste of the owner; yet it can not with safety be left wholly to personal feeling. The average man divides the task of making a home into two parts. He assumes charge of the building, and leaves matters of decoration and furnishing to his wife. He will naturally build as well as he can. He wants his house to be as fine as those of his friends or neighbors, or a little finer. He permits his architect to incorporate expensive construction on the plans, and his contractor to make expensive additions and alterations. The house practically wipes out his appropriation. The wife's part becomes a mere matter of stretching the little that remains until it can be made to cover absolute necessities.

Even with the best intentions, rigidly adhered to, few men possess the technical and esthetic knowledge necessary to determine what is essential and what unessential in the building of a house, just as few women possess the wide knowledge of costs and processes and the cultivated taste necessary to estimate the amount required for the home after the builder has finished. These things are matters for trained professional advice.

This advice must come from the architect or the decorator. It should come from the decorator. He is intimately familiar with all the processes of house furnishing. He is skilled in making estimates. He knows what is essential, and what can be left out. If every builder threshed things out with his furnisher before final approval of his plans there would be more well-balanced homes and fewer disappointments.

This, however, is purely academic. Builders will not look so far ahead. Too much effort is required, too much imagination. If the client is to be counseled as to the necessity of making suitable provision for the interior of his home, and if he is to be protected against the inevitable tendency to place all his eggs in one basket, the counsel and protection must come from the architect, who has the client under his influence during the long period when his ideas are in formation.

It may seem a counsel of perfection to ask of the architect that he shall deliberately reduce the cost of a building, which determines his commission, in order to provide things in which he can have no financial interest. No doubt this will not be so necessary in the future as it has been in the past, for there is a disposition on the part of many owners to pay their architect for whatever time he expends on matters of decoration. In any case, it appears that the best interests of the profession would be conserved by the insistence of the architect upon an adequate interior treatment, for the beauty and attractiveness of a well-designed house are so enormously enhanced by harmonious and comfortable furnishings that in the end the architect's reputation and his consequent power of securing a *clientele* will depend in no small measure upon the way his houses are furnished.

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Railroad Day At Land Products Show

November 20, "Railroad Day" at the recent Land Products Show, was assuredly a red letter day in local annals. A never-to-be-forgotten feature was the burlesque parade participated in by the Harriman line employes, representing the O.-W. R. & N. Co., the Southern Pacific and the Portland, Eugene & Eastern—both men and women taking part. The latter used hay wagons as vehicles, while the men, dressed as farmers, trudged on foot. An interesting section of the parade was the "Wheelbarrow Brigade," in which men appeared trundling barrows containing vegetables of Brobdingnagian proportions. Appropriate banners typifying the advantages of farm life were displayed. An iron-barred cage containing J. P. O'Brien, W. W. Cotton, M. J. Buckley, C. G. Sutherland, A. Blaisdell and H. E. Lounsbury—all Harriman officials—made a decided hit. Employes of the general manager's office propelled a train of cars, and a cider mill in operation dispensed apple juice to bystanders.

There were many other features. To the following railroaders is due the credit for providing so unique an attraction: Guy L. Anderson, chairman; J. M. Holmes, P. J. Hunt, H. Duessen, Guy Hill, Ray C. Soule, J. R. Hinhir, A. G. Brown, B. F. Riter, Miss Hart and Miss Amy Klum. Succeeding the parade were addresses by B. F. Riter, C. L. Smith, agriculturist for the O.-W. R. & N. Co., and Manager Bond, of the Land Show.

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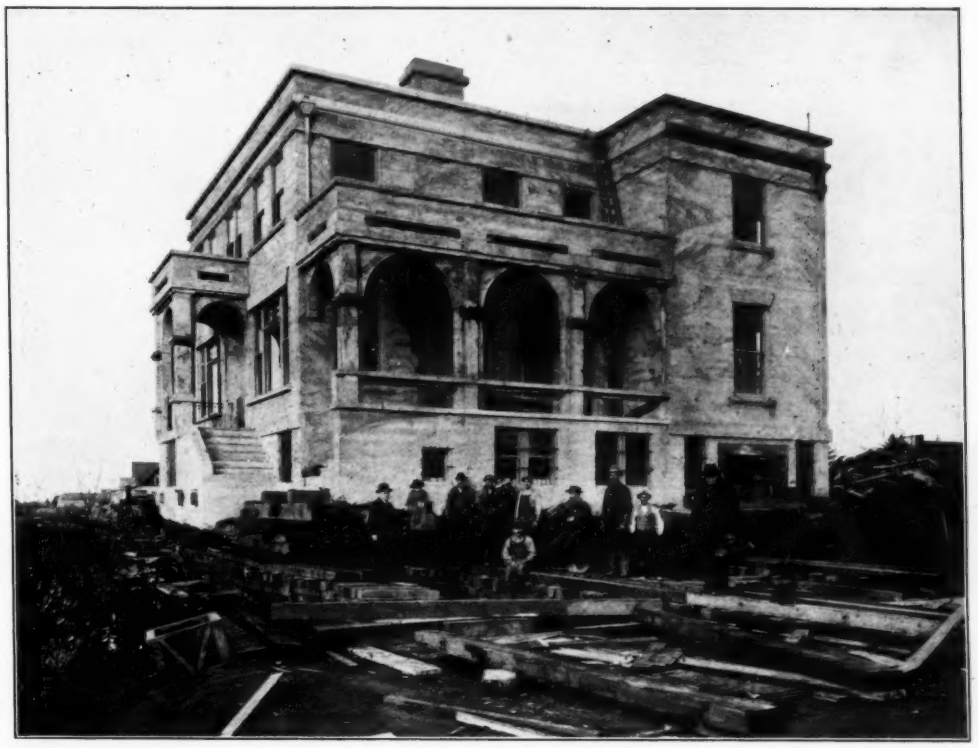
Haugsten-Lynch Marriage

October 26, 1912, H. G. Haugsten, of the *Daily Dispatch* of Portland, and Miss Helen E. Lynch, of Atlantic, Ia., were united in marriage. THE PACIFIC COAST ARCHITECT extends its hearty congratulations and best wishes.



Reinforced Concrete Building on the Move

The residence of Rev. A. Cestilli, on Willamette Boulevard, has the distinction of being the first residence in Portland constructed entirely of reinforced concrete, including stairways, mantles and roof. It has also the claim to being the first of its kind to be moved Its first location was on a peculiarly shaped lot jutting out on the cliff above Mott's Bottom, the roadway making a double curve around it. When work was first started there was some talk of widening the boulevard and the building was moved back ten feet from its first location after the foundation had been dug. Now it is intended to do away with the curve around this lot. The owner has sold the property and is having the building moved to another lot in the next block north, corner of Ainsworth avenue and Willamette Boulevard. Our illustration herein shows the building already moved out upon the roadway and about 100 feet on its way north.

The inside of the building is all plastered and floors in, though the outside is not yet finished, since it is to be cemented and lined off. The building contains 10 rooms; floors are of cement on tile base and partitions of 4-inch partition tile. A. D. Moodie is doing the moving, which will cost about $1200. Though the building weighs between 850 and 900 tons, there is so far not even a hair crack to be seen anywhere.

The building is being constructed by day's work from plans made by Otto Kleemann, the old pioneer architect of Portland, who has also the distinction of having introduced the first electric bell, the first art glass, the first hot water heating system and the first built-in fireless cookers in Portland.

Interesting Data on Concrete

In England tests have been made of a system of interlocking concrete piles, developing greater strength than sheet piling. In this system, says *Popular Mechanics,* reinforced concrete slabs are first placed between the locations for the circular piles. The slabs have overlapping or interlocking lugs, which form a tongue-and-groove connection and are set one above the other, the interlocking joints having circular holes for the admission of the piles. After the slabs have been placed, the pile can be passed through these holes and driven to a firm bearing, thus anchoring the slabs. This system is said to be particularly effective for breakwaters and protective works for canals and rivers.

The Lake Shore & Michigan Southern has an interesting concrete-distributing tower employed in building its roundhouse in Chicago. This has a diameter of 405 feet. To avoid the heavy cost of wooden towers for the application of the concrete, a portable 72-foot tower of steel was provided. This was placed on wooden skids with steel liners resting on railroad rails. The concrete is placed in one section, the guy wires loosened, and the tower, by a hoisting engine, is drawn back along the rails to the next position.

As a protection against the teredo, the harbor piles at Seattle are being coated with cement, applied by means of a cement gun. Poultry wire is wound about the pile to be treated, and the mixture forced on through the gun to a thickness of 1½ to 2 inches. This proves effective.

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Decaire Safety Boiler Company

The Decarie Safety Boiler Company, of Portland, has issued a neat and comprehensive booklet, amply illustrated and containing matter descriptive of its well-known products. The company's head office is at 1000-1016 Lewis Building, and the general office and works at 619-623 Upshur street.

Washington Chapter, A. I. A.

THE DECEMBER MEETING of the Washington State Chapter, A. I. A., was held at the College Club, Seattle, Wednesday, December 4, 1912. The special subject of the meeting was "Architecture as a Fine Art." The president's address on the subject at the annual meeting held the previous month formed the basis of discussion.

Mr. C. F. Gould and Mr. Myers, members of a special committee to whom the subject had been referred, opened the proceedings with an able presentation of views giving many ideas for discussion, of which the other members present took advantage. Mr. Gould brought out the value of this expression of ideas on so vital a subject, and expressed a hope that some outdoor meetings might be held in an environment inspiring to artistic natures. Mr. Myers congratulated the Chapter on its consideration of this fundamental aspect of architecture and gave expression to the hopeful signs in the architecture of today. The use of historic styles in different modern structures he did not consider to be a slavish adherence to precedent, but a healthy development of the architecture handed down to us from the past.

In the discussion that followed, practically every member present took an active part. Mr. Loveless, Mr. Bohne, a visting architect from the Louisville Chapter, Mr. Willatzen and Mr. Huntington gave expression to individual views on the art of architecture as affecting the work of today. Mr. Loveless spoke of the logical growth of architectural styles as determining the architecture of the present and future; Mr. Bohne spoke of growth and development depending on idealism and sentiment; Mr. Willatzen pleaded for a logical expression of each problem, and Mr. Huntington, in speaking of architecutre as an evolution, described our condition today as a "Renaissance of Mind."

Other valuable contributions to the discussion were made by Mr. Hanson, who expressed optimistic views on the tendency of modern work and on awakening interest displayed by the public, with a note of warning to the architect as to the danger of ill-considered attempts at originality. Mr. Blackwell spoke in behalf of a truthful expression of the building material in the architect's work, and in respect to the architect's training as affecting his use of precedent. Mr. Thomas expressed the belief that the more thoroughly the student was grounded in the historic styles, the harder it would be for him to depart from them. Mr. Gould spoke for the French school, stating that its training did not cause its students to become wedded to precedent, but the classic forms exerted an influence which no true architect could escape.

Although the valuable store of ideas was in no way depleted, the discussion was brought to a close by a motion that a series of meetings be arranged by the Chapter's Program Committee bearing on this subject of "Architecture as an Art."

Previous to this special feature of the program, Mr. Stephen, a member of the Chapter on the Board of Appeal of the City of Seattle, gave a review of recent important work done by the board, with a statement of some difficulties preventing their effectiveness. No funds were at their disposal to investigate and test new material, yet the board was required to establish rules governing its use. Proper provision was not made for enforcing the rulings of the board and it was often charged with duties not within its province. By vote of the meeting the question of Chapter efforts to improve these conditions was referred to the Legislative Committee.

The following were elected members of the Chapter: Regular member, Edgar Blair, architect of Seattle School Board, and as junior members S. Clyde Merrell and G. C. Field.

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Of Interest to the Architect and Builder

From the primeval period when man laid himself down to rest upon his rudely constructed couch, until the present time, many and varied are the devices in beds that have appeared in an effort to afford greater comfort and convenience. This is an age of convenience. We are ever seeking the "point of least resistance" in everything we attempt in our daily duties and journeys attendant thereto. It is what might rightly be termed "a natural law."

The present day knows no greater invention in beds from a standpoint of convenience, economy of space and comfort than the Murphy bed. It embraces, in a thoroughly practical way, all the essential features that experts have for years striven to embody in a disappearing bed. It is the latest word in bed construction. Its perfect concealment, the ease, simplicity and quickness with which it can be operated, together with its attractiveness and comfort, are other features that demand the consideration of the prospective builders of apartment houses, hotels and homes. Then, too, the fact that it requires no special construction has won for it the approval of the foremost architects

and builders. Attached to an ordinary stock door, 1¾ inches in thickness, 3 feet in width and 6 feet 10 inches in height, in a closet of ordinary depth and width, without in any way interfering with the usefulness of the closet, it transforms the living room into a sleeping room, or sleeping room into a living room, in a few minutes, and this with little or no exertion. Another feature that has an appeal is that it has the appearance of the standard type of brass and iron bed. In fact, the Murphy bed is really a standard bed—standard in length, in width and height. Its installment in the apartment house, hotel or home, leaves nothing to be desired in convenience, in comfort, in attractiveness, in economy of space and in ease of operation.

That the Murphy bed is the most practical that has yet appeared is conceded. Besides being in use and giving thorough satisfaction in many apartment houses in the West, this bed is specified for many apartment houses and homes now planned and under construction.

The display rooms are located in the Henry building, Portland.

Making the Most of Small Rooms

When decorating small rooms, the natural aim is to make them appear larger than they really are. After all, it is not what a room actually is, but what it appears to be that counts.

Much depends upon the color used on the walls. The average man doesn't realize this fact, although he may feel that, somehow, he made a mistake when he put red paper on that dining room of his just because red is commonly supposed to be the proper color for dining rooms. He has missed the point that red makes a room look smaller—pulls the walls in, as it were.

Yellow and tan have the opposite effect, making a room appear to expand. Blue, too, helps to push the walls away. Yellow, however, is too strong for a very light room; and lighting conditions must be considered as well as size. Gray and pink serve to make a small room look rather more spacious, but the common shades of green and brown are neutral in their effect. Perhaps that is one reason why so many people seem instinctively to select green, even though it is a poor color for a room that is not well lighted. Still, fairly satisfactory results can be obtained, even in poorly lighted rooms with a few warm shades of green.

Comparatively plain walls help to make small rooms look larger. Walls with large, sprawling figures in bold colors seem to be falling in on one. The effect of height is gained by using striped papers and carrying them to the ceiling. Sometimes the side wall paper is even carried into the ceiling for a foot all around in order to deceive the eye still further. This, of course, tends to make a small room seem even smaller than it is.

If the room is high posted out of proportion to the other dimensions, a wide frieze will tend to bring the ceiling down. A cornice helps, also; but the most pronounced result is gained by using a ceiling paper and bringing it down the walls for a foot or more on all sides. This ceiling paper, by the by, is best always plain, cream being a good shade. Under no circumstances should the ceiling in the small room be made darker than the side walls; the occupants will feel, when that is the case, as if they were in danger of being crushed.

When the rooms in a house are small, it is always a good plan to have as many open doorways as is feasible, and to have the walls in all the rooms decorated in similar tones. In this way, the apparent spaciousness of all the rooms is enhanced.

The proportions of a room may be changed to the eye by the manner in which the draperies are handled. The impression of height is gained by emphasizing the vertical lines, as can be done by hanging the curtains at the top of the window casing and allowing them to reach the floor. The contrary effect is produced in a measure by bringing the curtains well to the sides of the windows and permitting them to extend only to the bottom of the sill. Of course, the arrangement of the curtains must also be considered with respect to the windows themselves. Odd or ugly windows require special forms of treatment.

Massive furniture in a very small room is incongruous. Many people err by introducing heavy mission pieces into a tiny city flat. Furniture built on broad, straight lines obviously demands large rooms. The fact, though, that pieces are simple in design and free from curves does not rule them out, by any means. On the contrary, such furniture is by far the best, if not too heavy. It would be a blessing if the makers would produce more of this simple furniture; but they would find it more difficult to cover imperfections.

Willow or wicker furniture is well adapted to small rooms and has the added merit of being inexpensive. It is easy to move about, easy to keep looking well, and is made in many attractive designs. It is commended to the attention of people living in city flats, and to others who have small rooms, although it is just as available for people having country homes and large apartments.

* * *

Consider the Trade Paper

Did you ever take the time to mull over the fact that no man or institution ever became great except through publicity, and usually publicity via the use of printers' ink? It matters not what the qualifications are for greatness. One of the essentials is informing the public of these qualifications, accomplishments, or whatever they may be, that the fact of greatness itself may be created. Without this nothing could become great, because it would have no way to reach the world and exercise its great faculties, nor would the world on the other hand have a chance to know of these faculties or qualities.

What is true in regard to men, localities, institutions and incidents that have been handed down through history by virtue of writing and publishing is true today in a much more general manner of industrial progress. This includes men with ideas who accomplish things, and also the ideas themselves, both scientific and mechanical, and the progress of their development. This would all come to naught were it not for the means of recording and disseminating the information.

In the industrial world it is the trade paper that is the great dependable medium for this work. It keeps in touch with and exploits men, machines, methods, and ideas, and is thus the vehicle that piles up the greatness of the worthy ones. But too often the ideas themselves are appreciated and the medium through which the public receives them and the originators derive benefit is overlooked, neglected and even abused.

Just mull over this fact for awhile and then you will be in better position to consider the trade paper in the light it should be considered. It is one of the greatest agents of progress in the land today. There are more of them and they are finer and greater here in the United States than anywhere else in the world. It is one of the first things that the industrial captains from other countries notice when they come into this country, the magnificent trade papers that are published and the amount of matter contained therein. They marvel over it. It is marvelous in a way, too, yet the whole thing is simple. It is a part and parcel of the machinery of development that has made the United States great as a nation that does things and makes wonderful and rapid strides in progress.

All the ideas would not be worth much were there not some such means for disseminating them, and, moreover, many of the ideas would not exist without this means. It is the publishing of ideas that generates others, and in this way the trade paper is a source of inspiration as well as information, and it would be hard for any man to give more credit than is deserved by the worthy trade paper.

So, while you are busy boosting your own affairs and those of the industrial world generally, and thinking with pride of the great things that have been done and the possibilities ahead, stop for a minute and give the trade paper what consideration is due it.—*The Clay Worker.*

October Steel Output 3,000,000 Tons

The *Iron Trades Review* reports that the steel production of 3,000,000 tons in October, in the United States, broke all previous records. To the Steel Corporation is credited one-half of the production. The highest previous record was for 1910. That year the great mills turned out 26,000,000 tons, but this output would be 10,000,000 tons less than that of this year, had the rate per month for all months been as great as October. The tremendous activity in all building lines the country over—and this is largely an age of steel construction—is constantly taxing the capacity of the steel mills to the utmost.

Floor Illumination for Hospitals

Placing light units under the floors of hospital wards is proving a practical auxiliary to the regular lighting system. Such units are being used in the German Hospital, New York, the floors above the lamp pits being, of course, glass, and the sides and bottom of the pit being lines with a reflecting surface.—*Popular Mechanics.*

A complete military settlement of reinforced concrete buildings is in the making at Angel Island, Cal. The entire military post, now rebuilding, is being reconstructed of this enduring material.

Industrial Publications

Roofing Tin, the Taylor bulletin for the roofing trade for the month of December, is out. Particularly noticeable is the front cover illustration, showing the Carnegie Library, Howard University, Washington, D. C. This handsome building is covered with 75,000 square feet of "I X Target and Arrow" roofing tin, manufactured by the N. & G. Taylor Co., Philadelphia. The text is interesting as usual. We are also in receipt of the company's official price list, effective December 1, 1912, specially interesting to contractors and architects.

Lumber Trade Increasing Heavily

October showed a heavy increase in local lumber production, with prospects of still greater increase before the end of the year. Export and coastwise shipments out of the Columbia were very large in October, and November's business, even at the middle of the month, promised to surpass that of a year ago. Prospects for inland shipments by rail were never better. One prominent lumberman opines that the rail trade next year will vastly exceed that of any year yet recorded. He says that this will prove equally true of foreign trade. Should the tariff restriction on lumber from British Columbia be reduced or removed, it will bring that product into competition. The Panama Canal will be a heavy factor to consider in the future.

A Misadvertence

In our November issue, in an item relative to the N. & G. Taylor Co., of Philadelphia, this publication by misadvertence made a slight error. The item referred to the contract for roofing tin for St. Ignatius' Church, San Francisco. It should have stated that the Forderer Cornice Works holds the general contract, and not the Taylor people, and the contract includes the entire sheet metal contract, tin to be furnished by the N. & G. Taylor Co., of Philadelphia, Pa.

Trade Notes

Architect C. Ferris White, of Spokane, Wash., has moved to Wenatchee, Wash.

C. J. Parker, of Parker & Banfield, is spending the holidays at his old home near Kansas City.

G. E. Burks, formerly with the Crane Company at Dallas, Texas, is now with the Kendall Heating Company.

State Architect W. C. Knighton has returned to Salem, after spending a short time in Portland on business.

Architect John V. Bennes, of Bennes & Hendricks, has returned from a business trip to Corvallis.

Architect E. E. McClaran, with offices in the Lumber Exchange Building, has returned from a business trip to Eastern Oregon.

S. Paton will represent the Holmes Disappearing Bed Company in British Columbia, with headquarters at Vancouver. Mr. Paton succeeds Mr. Chase.

Architect David C. Lewis, with offices in the Couch Building, has returned from a business trip to San Francisco.

O. K. Edwards, manager of the Pacific Face Brick Company, has returned from a business trip to Spokane, Wash.

Architect Morris H. Whitehouse, of Whitehouse & Fouilhoux, has returned from an extensive business trip to New York City.

J. C. C. Morris, northwest manager of the H. W. Johns-Manville Company, with headquarters in Seattle, was a recent caller at their Portland office.

Architect E. A. Wager, after an absence of several months, has returned to Seattle, Wash., and has opened an office at 732 New York Block.

H. P. Scheel, secretary and treasurer of the Hercules Sandstone Company, Tenino, Wash., was a recent visitor in Portland on business.

William D. Edwards, mechanical engineer, with offices in the Wilcox Building, has returned from a business trip to Spokane.

I. W. Schiffer, manager of the Lithic Mfg. Co., has returned to work after being on the sick list for two weeks.

F. W. Eastman, vice-president of the Far West Clay Company, of Tacoma, Wash., was a recent visitor in Portland on business.

Mr. L. R. Bailey, of the L. R. Bailey Company, architect and engineer, has gone on an extended Eastern trip. Mr. Bailey will visit Toronto, Canada, and Atlanta, Ga., before returning.

The Washington Brick, Lime and Sewer Pipe Company, through their local representatives, furnished the brick on the Nob Hill Apartment House.

Out of nine taking the recent civil service examination for first grade building inspector, Mr. F. W. Eichenlaub passed with the highest grade (88.56 per cent) and received the appointment. Mr. L. Watts was appointed plan clerk, having received the highest grade out of four taking the examination.

William P. Dawson, treasurer of the Portland Architectural Club, is on an extended visit to his home in Phila-

delphia. Mr. Dawson expects to remain until after the holidays.

The Parelius Manufacturing Company has opened an over-town office, 522 Chamber of Commerce Building, for estimating and the convenience of their customers. Mr. George S. Dean will be in charge.

F. L. Chase, for some time past the British Columbia manager of the Holmes Disappearing Bed Company, is now affiliated with the Electric Fixture & Supply Company, 117 Marion street, Seattle, Wash.

The Pacific Iron Works, east end of Burnside Bridge, has the contract to furnish 200 tons of structural steel for the Standard Oil Company's new buildings at Linnton, Ore.

Architect E. Frere Champney, Henry Building, Seattle, Wash., is in San Francisco, where he will take up his work as chief of design for the Panama Pacific Exposition.

The Tregillus Clay Products Company, with offices 432 to 438 Lougheed Building, Calgary, Canada, has the province of Alberta for the Waite-Fullerton line of building materials, starting with November of this year.

Atholl McBean, secretary of Gladding, McBean & Co., of San Francisco, was a recent visitor in Portland on business.

Mr. S. B. Cooke, local manager of the Holmes Disappearing Bed Company, has returned from a two months' trip. While away Mr. Cooke visited New York, Boston, Philadelphia and many of the other large Eastern cities.

Architect J. Merrill Brown is now associated with Mr. Charles Haynes, Melhorn Building, Seattle, Wash. Mr. Brown comes originally from Boston, Mass., where he had a large practice throughout the New England states.

Architect Allen Strowd, of Vancouver, B. C., has returned after spending several days in Portland. Mr. Strowd reports that the building conditions in his city are very good.

The Pacific Iron Works has the contract to furnish 150 tons of cast iron columns to be used in the new building at Seventh and Washington streets. The cast iron columns will be used on the first floor, in order to economize space.

Architect J. C. Howard, of Burke, Howard & White, of Toronto, is in Vancouver, B. C. Mr. Howard will let the contract for the Hudson Bay Company's new $1,000,000 store building while in Vancouver.

Columbia Brick Works, with offices at 265 Hawthorne avenue, is furnishing the common brick on the Empress Theatre Building, and has just finished the delivery on the Frank Lanning Building, Twentieth and Hawthorne avenue.

Mr. I. H. Frank, for some time local representative for Waterhouse, Price & Co., is on an extended trip to New York City and other Eastern cities Mr. Frank will call on several of the factories that his firm represents on the Coast, and will visit his old home at Terre Haute, Ind., for the first time in twenty years. After January 1, Mr. Frank can be found with Waterhouse, Price & Co., San Francisco.

Fred W. Wagner, 363 Stark street, has on display in his show rooms an elaborate line of reading lamps. This line is of Russian design, brass, hand-sawed, underlined with silk, and each lamp is patented as to design and style. A striking feature is the illuminated pedestal. This type of lamp is handled by Wanamaker, of Philadelphia, and other large Eastern dealers.

E. F. Tindolph, western manager of the Grand Rapids Veneer Works, of Grand Rapids, Mich., was a recent visitor in Portland. Mr. Tindolph is installing two dry kilns for the Baker White Pine Lumber Company at Baker, Ore. The Far West Clay Company, of Tacoma, Wash., is furnishing the partition tile and constructing the buildings.

The Pacific Face Brick Company, of Portland, has been awarded the following contracts: Red face brick for the new Calhoun residence in Irvington, Portland; H. L. Camp & Co., contracting architects. Brick for the Geo. W. Bates & Co. building to be erected on Mr. Bates' new concrete dock at the west end of the Burnside Street Bridge, Portland; Bridges & Webber, architects; Hurley-Mason Company, contractors.

* * *

A Resume

Recent items selected from the Daily Advance Reports of The Pacific Coast Architect.

PORTLAND.

Remodeling—Architects Emil Schacht & Son prepared plans for remodeling a two-story brick building on Third and Alder streets for the Clifford Investment Company.

Residence—L. R. Bailey Company, architects and builders, prepared plans for a one and one-half story frame dwelling to cost $4000 for J. W. De Young.

Remodeling—Architects Doyle, Patterson & Beach prepared plans for remodeling a three-story brick building on First and Stark streets for the Corbett Estate, to cost about $10,000.

Bungalow Office—Architect R. N. Hockenberry prepared plans for a bungalow office building, to be erected near Salem for the Waldo Hills Orchard Company.

Bungalow—Architects Baker & Baker prepared plans for a six-room bungalow for W. B. Brown, of Woodburn.

Residence—Architect R. N. Hockenberry prepared plans and let the contract for an $8000 residence for Dr. Sam C. Slocum, to be built on Westover Terrace.

Hotel—Architect Lewis I. Thompson has been commissioned to prepare plans for a four-story brick hotel, 50x75, to be built on Thirteenth and Main streets, to cost $50,000.

Residence—Architects Johnson & Mayer are preparing plans for a two-story frame residence for H. M. Courtright, to cost $25,000.

Club Building—Architects Jacobberger & Smith have been commissioned to prepare plans for a two-story club house, to be erected by the Knights of Columbus in Hillsboro, at a cost of $8000.

Store Building—Architects Emil Schacht & Son prepared plans for a one-story brick store building for the Blaesing Granite Co., to cost $4000.

Club House—Architects Whitehouse & Fouilhoux are preparing plans for a club house for the Tualatin Country Club, to be built near Portland.

Grain Elevator—The California-Oregon Grain Elevator Company will erect a ten-story reinforced concrete elevator near the east end of the Steel Bridge. Plans were prepared by Architect W. R. Sink, of Chicago.

Bungalow—George W. Foreman, architect and builder, prepared plans for a $3000 bungalow, to be built on East Forty-ninth and Alder streets, for Miss Selma Mundt.

Picture Theatre—Architect Lewis I. Thompson has been commissioned to prepare plans for a two-story fire-proof moving picture theatre, to be built on Sixth street, near Washington.

Residence—Architects Roberts & Roberts prepared plans for a six-room residence, to cost $2500, for W. D. Strauser.

Summer Home—Architects Johnson & Mayer are preparing plans for a Swiss chalet, to be built at Ocean Park, for Miss Kate Wintler, at a cost of $4000.

Store Building—The Rose City Importing Company will erect a three-story brick building, 50x100, on Third and Alder streets.

Store and Office Building—Architect J. D. Dautoff is preparing plans for a modern six-story building, 50x100, to be erected on Third and Yamhill streets for Cohn Bros. The building will be of fire-proof construction and cost $100,000.

Business Block—Architect David C. Lewis has been selected to prepare plans for a building to be erected for the Northwestern Electric Company on the Pittock Block. The building will be a Class A structure, eight stories in height, and will cover the entire block.

Cordage Plant—Architects Emil Schacht & Son have been commissioned to prepare plans for a $1,000,000 plant for the Portland Cordage Company at Manila, P. I.

Flats—Architect C. Manson White prepared plans for a two-story frame four-family flat building, to be erected in Overlook Addition.

Residence—Architects Williams & Truenbach prepared plans for an eight-room two-story frame residence for a local physician.

Bank and Office Building—Architects Doyle, Patterson & Beach have been commissioned by the Northwest Fidelity Company to prepare plans for a building to replace the Marquam Building. The building will be of reinforced concrete construction, twelve stories in height, 60x200, and will cost about $600,000.

Residence—Architects Roberts & Roberts prepared plans for a six-room frame residence to be built in Piedmont by James Gilham.

Laundry—Architect Ellis F. Lawrence is preparing plans for a two-story brick and concrete building, 75x200, for the Troy Laundry Company. Mr. Lawrence is also preparing plans for a brick and concrete stable, 30x200, for the same company. The buildings will be erected on East Davis, between Tenth and Eleventh, and will cost $70,000.

Residence—Architects Root & Hoose prepared plans for an $8000 residence to be erected on Palatine Hill for C. E. Power.

Residence—Architect L. D. Carter prepared plans for a two-story frame residence to be built on Arlington Heights for James S. Johnston, at a cost of $5000.

Business Block—Architect Fred A. Legg prepared plans for a two-story brick business block to be built in Salem by Vick Bros. The building will be 40x165 in size, and cost $12,000.

Stable—Architect J. B. Clark prepared plans for a two-story brick stable, 50x100, to be erected on the East Side by a local transfer company.

Business Block—Architect C. A. Duke prepared plans for a five-story reinforced concrete building for the Kentucky Liquor Company, to be erected on First and Jefferson, at a cost of $35,000.

OREGON.

Paper Mill—Oregon City. The Hawley Pulp & Paper Company will erect a three-story concrete building, 142x40 in size.

Theatre—Medford. The Medford Realty & Investment Company will remodel a building for the People's Amusement Company at a cost of $10,000.

Y. M. C. A.—Klamath Falls. Funds are being raised in Klamath Falls and by the Portland Y. M. C. A. with which to erect a club building.

Theatre—Albany. Conrad Meyer will erect a two-story pressed brick theatre building, at a cost of $25,000, for T. G. Bligh, of Salem.

Gymnasium—Springfield. The School Board is planning to erect a gymnasium, 50x80 in size.

Stable—Cottage Grove. The Commercial Stables will erect a corrugated iron building, 98x72. A brick addition, 80x94, will be built early in the spring.

Residence—Vale, Knowles & Drapier, architects and contractors, have prepared plans and started work on a fine residence for W. G. Thompson.

City Hall—Milton. The City Council has authorized that plans and specifications for a city hall be submitted.

High School—Eugene. The school district has voted $20,000 bond issue with which to purchase a site for a high school.

Store and Lodge Building—Medford. Architects Powers & West are preparing plans for a two-story brick store and lodge building for Dr. A. J. Helms.

Theatre—Medford. Architects Powers & West are preparing plans for a theatre building to be built by Dr. F. C. Page.

Hotel—Springfield. A company is being organized to erect a $40,000 hotel building. The building will be four stories, constructed of brick or reinforced concrete.

Mausoleum—Ashland. The International Mausoleum Company will erect a concrete building, 45x120, at a cost of about $100,000.

Church—Burns. The Presbyterians will begin work early in the spring on a $10,000 brick or stone church.

Business Block—Wallowa. E. A. Schiffler will erect a brick business block, 65x100 in size.

Masonic Temple—Klamath Falls. The Masonic Lodge is planning to erect a four-story store, office and lodge building.

Ice Plant—Springfield. The Henry Weinhard Estate will erect a modern ice factory and cold storage plant.

Warehouse—Eugene. Architect D. L. Harden prepared plans for a two-story warehouse for J. W. Quackenbush & Son.

Garage—Springfield. A. Wilhelm intends to erect a fireproof building, 75x100.

SEATTLE.

Office Building—Architects Bebb & Mendel have been commissioned by J. C. Lang to prepare plans for an eight-story building to cost $75,000. Only three stories to be built at present.

Elks' Building—Architect Julian Everett prepared plans for a three-story concrete store and lodge building, to be built at Port Townsend, at a cost of $22,000.

School—Stephens & Stephens have been commissioned to prepare plans for a $100,000 high school building to be erected in Hoquiam.

Residence—Architect John Graham prepared plans and let the contract for a $12,000 residence for Manager Stephens of the Fleischmann Yeast Company.

Remodeling—Architect Clayton D. Wilson prepared plans for remodeling the Bacher & Grinninger Building.

Factory—Architect U. Grant Fay prepared plans for a factory building to cost $8000 for the Coops Piano Manufacturing Company, of Tacoma.

Store Building—Architects Josenhans & Allen prepared plans for a one-story brick building for Lars Rasmussen.

Apartment House—Architects Daniel R. Huntington and Arthur J. Loveless completed plans for a three-story brick apartment house, to cost $100,000, for the Peninsula Land & Building Company.

Office Building—Architect Frank C. Allen, Inc., prepared plans and let the contract for the construction of a ten-story fire-proof office building, to cost $400,000, for the Washington Securities Company.

Summer Hotel—Architect A. Warren Gould is preparing plans for a $100,000 addition to the hotel at Sol Duc Hot Springs.

Reformatory—Architects Saunders & Lawton prepared plans for a state reformatory, to be built at Monroe.

WASHINGTON.

Church—Olympia. Architect C. J. Mohlet prepared plans for a church for the St. Michaels Congregation.

Brewery—Chewelah. Joseph Pohle announces that the Chewelah Brewery will remodel their plant and double their capacity.

Library—Clarkston. The plans of Architect J. H. Nave for the $10,000 Carnegie Library have been accepted, and work will begin at once.

Business Block and Stable—Hoquiam. Lyon & Irwin will erect a concrete livery stable and a two-story modern concrete business block.

Business Block and Garage—Aberdeen. Mrs. Gean B. Stewart will erect a two-story concrete business block, 50x100, and a one-story concrete garage, 50x65.

Business Block—Toppenish. H. Mallery, of Olympia, is erecting a two-story business block, 25x70.

Factory—Walla Walla. Architects Osterman & Siebert are preparing plans for a $500,000 plant for the Brown-Lewis Mfg. Company. There will be six buildings, from one to four stories in height, covering a ground space of 250x660 feet.

Elks' Building—Spokane. The Elks' Lodge will build a $25,000 lodge building.

Theatre—Abredeen. Edward Dolin had plans prepared for remodeling the Boston Block for a moving picture theatre, at a cost of $5000.

Residences—Spokane. The Chamberlin Real Estate & Improvement Co. will erect forty-eight houses in Yardley, at a cost of $100,000.

Business Block—Tacoma. Architects Heath & Gove prepared plans for a four-story brick store building, 50x120, for Gabriel Wallis, to cost $35,000.

Apartment House—Aberdeen. Mrs. M. M. Bacon will build a $25,000 addition to the Broadway Apartments.

School—Waterville. Architect C. Ferris White, of Spokane, prepared plans for a $40,000 school building.

Box Factory—Leavenworth. The Leavenworth Lumber Company will erect a $50,000 box factory.

Postoffice—Toppenish. Frank A. Williams will erect a one-story brick building, to be used for a postoffice.

Store Building—Chehalis. T. R. Behrend will erect a modern brick store building, 25x100.

Hotel—Leavenworth. A stock company has been formed with a capital stock of $30,000 and will erect a modern three-story pressed brick hotel.

Business Block—Bellingham. R. J. Morse, of the Morse Hardware Company, is having plans prepared for a two-story reinforced concrete business block.

Church—Hartford. A $5000 church will be built by the Congregationalists at Lake Stevens.

Hall—Centralia. The Salvation Army will erect a two-story brick army hall, at a cost of $8000.

Store—Tacoma. Architect C. F. Landberg prepared plans for a one-story store building, 36x60 in size.

IDAHO.

Hotel—Boise. Architects Tourtellotte & Hummel, Boise, have plans completed for a five-story hotel for L. P. Kieldsen, to cost $100,000.

Hospital—Lapawi. The Government has begun work on a $10,000 sanitarium on the Indian reservation.

School—St. Maries. At a recent election it was voted to build a two-story brick school building to cost $60,000.

Fair Buildings—Lewiston. Architect J. H. Nave prepared plans for four buildings for the Northwest Livestock Association.

Telephone Building—Twin Falls. The Mountain States Telephone & Telegraph Company is planning to erect a two-story office and exchange building.

Postoffice—Couer d'Alene. Mrs. Teresa Graham will erect a modern brick structure to be used as a postoffice.

Church—Weiser. The Episcopal Church is having plans prepared for a modern church building.

BRITISH COLUMBIA.

Theatre and Office Building—Vancouver. Architect E. W. Houghton is preparing plans for a $500,000 theatre and office building for a New York syndicate. The building will be a fire-proof structure, 100x100 in size.

Factory—Vancouver. The Smart Bag Company will erect a large factory building, 200x200, of fire-proof and heavy mill construction.

Warehouse—Vancouver. Architects Parr, McKenzie & Day prepared plans for a seven-story concrete and mill construction warehouse, for the Canadian Fairbanks Morse Company, to cost $200,000.

Dairy Building—Vancouver. Architects Braunton & Leibert prepared plans for a four-story reinforced concrete building, 80x100, for the Standard Dairy Company, to cost $70,000.

Office Building—New Westminister. The Dominion Trust Company is having plans prepared for a modern eight-story fireproof building, to cost $200,000.

Training School and Warehouse—Vancouver. The B. C. Telephone Company had plans prepared for a training school, to cost $30,000, and also plans for a stone and brick warehouse, to cost $100,000.

Hospital—Vancouver. Plans have been prepared for an administration building for the city hospital authorities, to cost $55,000, and an isolation hospital to cost $75,000.

Store Building—Vancouver. Architects Braunton & Leibert prepared plans for a four-story brick building for J. W. Powell, to cost $45,000.

Jail—New Westminister. The City Council has decided to erect a $20,000 city jail.

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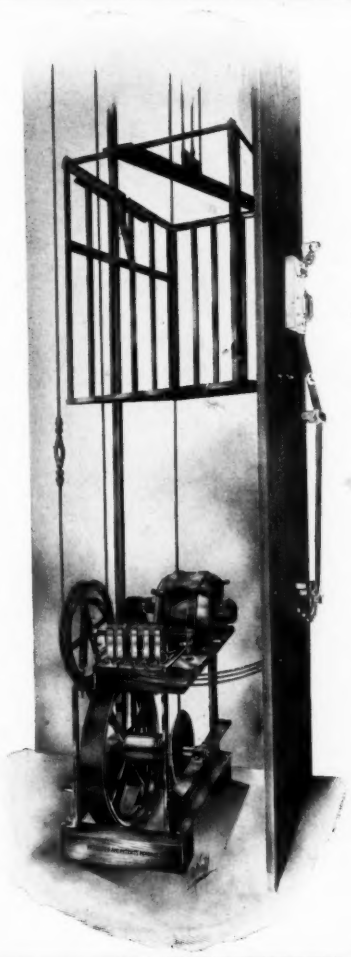

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RECENT INSTALLATIONS

Apartments		Clubs	
Hanover 6, Wellesley Court 4, Malcliffe Court 4, Barrett Bros. 5, Cromwell 7.		Commercial Club	Portland
		Elks	Eugene
Hospitals		**Buildings**	
Sisters of Charity	Medford, Oregon	Journal	Portland
Sisters of Charity	Vancouver, Wn.	Chambers	Portland
Dr. E. M. Rininger	Seattle, Wn.	Paladini Hotel	San Francisco
Children's	San Francisco, Cal.	L. B. Menefee, Residence	Portland

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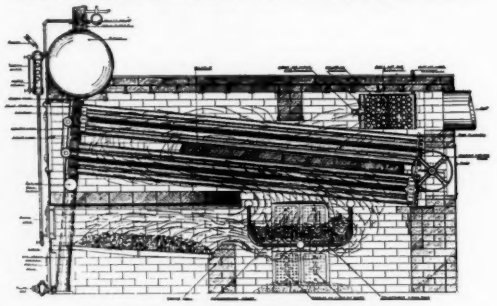

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Hart Apartments	Hanthorn Apts.	Jos. Jacobberger, Res.
Upshur Apartments	Beryl Apartments	Henry Legler, 448 Clay
Rose-Friend Apts.	Teasdale Apts.	C. A. Carpenter, Arch.
Wheeldon Annex Apts.	Ormonde Apts.	Parish of Holy Cross
Trinity Apartments	Wickersham Apts.	St. Mary's Orphanage
Edemholme Apts.	Bjelland Apts.	Dental College
Holmer Apartments	Lillian Apartments	Ruef Bros., Salem
Burch Apartments	Wiest Apartments	Mt. Angel Academy
King-Hill Apts.	Dricksten Apts.	Joseph Smith, Res.
Belle Court Apts.	Dently Hotel	J. M. Richards, Res.
King Davis Apts.	Lenox Hotel	Lottie Vincent, Res.
Grand Oak Apts.	Glenwood Hotel	W. C. Alvord, Res.
North Portland Hotel	Beaver Hotel	Dillen Rogers, Res.
Macleay Building	Dooley Hotel	
Waverly Country Club	Central Building	

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